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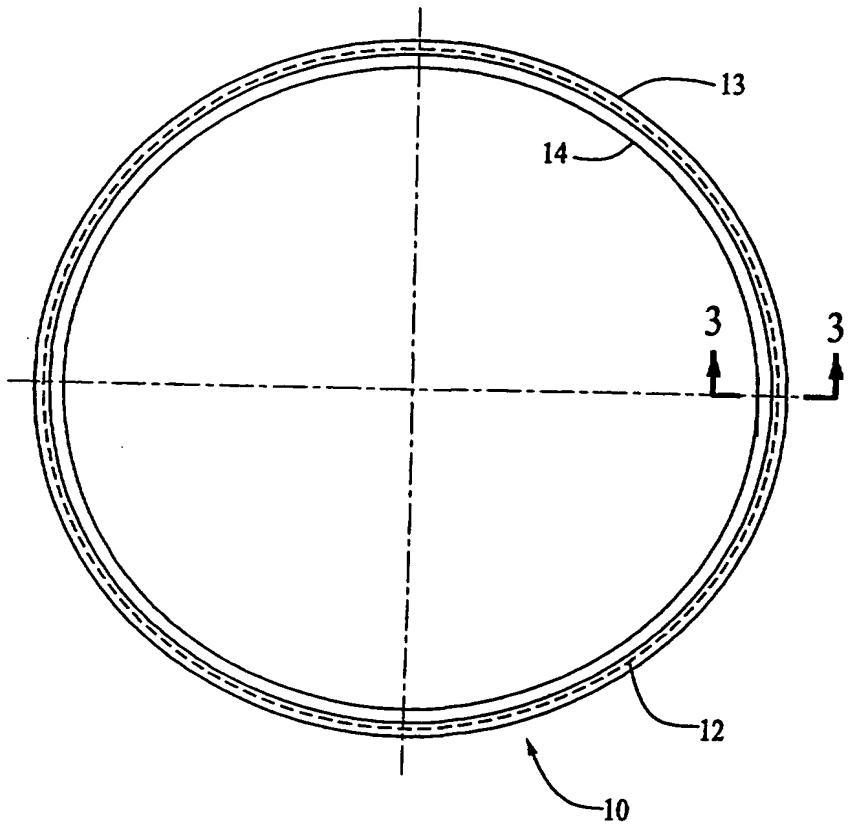
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(54) Title: BLADE RING SAW BLADE



(57) Abstract: A flat-sided annular blade for a blade ring saw for cutting hard material such as tile along straight paths and curved paths in which the workpiece is moved through the central portion of the blade. In addition to the usual sintered abrasive diamond coating on the outer peripheral portion of the blade, the inner peripheral portion preferably is tapered to a curved inner edge and also is coated with an abrasive, preferably an electroplated diamond coating providing smoother sawing operation and a finishing action on the workpiece.

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A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : B26D 1/04; B24B 1/00
US CL : 83/835,837,656,447.2,663

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 83/835,837,656,447.2,663; 451/20,57,58,69,70,71,125,178,241,244,411,412,541; 125/15,13.1,14

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
East Search

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 6,012,977 A (YOSHIKAWA et al.) 11 January 2000 (11. 01. 2000), column 1, lines 10-64 and column 3, lines 41-67.	1-5, 7-10, and 12-16
Y		2, 3, 5, 9, 10, 14, 15, and 16
Y	US 5,951,378 A (MILLER et al.) 14 September 1999 (14. 09. 1999), column 5, lines 29-67 and column 7, lines 14-67 and column 8, lines 1-43.	2, 3, 5, 9, 10, 14, 15, and 16
Y	US 6,354,909 B1 (BOUCHER et al.) 12 March 2002 (12. 03. 2002), column 1, lines 62-67 and column 2, lines 1-10.	2, 3, 5, 9, 10, 14, 15, and 16
A	US 5,471,970 A (SAKARCAN) 5 December 1995 (05. 12. 1995), Figure 3 and column 4, lines 9-50.	1-16
A	US 4,576,139 A (COGSWELL) 18 March 1986 (18. 03. 1986), Figures 1 and 2.	1-16
A	US 5,351,444 A (STEERE, Jr.), 4 October 1994 (04. 10. 1994), Figures 1-3.	1-16
A	US 3,556,074 A (NELKE) 19 January 1971 (19. 01. 1971), column 3, lines 20-52.	1-16
A	US 5,495,844 A (KITAJIMA et al.) 5 March 1996 (05. 03. 1996), column 2, lines 16-58.	1-16

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C. (Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A, P	US 6,517,427 B1 (YOSHIKAWA et al.) 11 February 2003 (11. 02. 2003), column 2, lines 49-65 and col. 3, lines 1-55.	1-16
A	US 6,632,126 B1 (COGSWELL) 14 October 2003 (14. 10. 2003), Figures 1-3.	1-6